

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 10/050,112

REMARKS

Claims 14-19 are added. Therefore, claims 1-19 are all the claims pending in the application.

I. Drawings

The Examiner objects to the drawings because the screw hole recited in claim 9, line 3 and claim 12, line 3 is not shown in the drawings. Therefore, Applicants submit herewith one sheet of proposed drawing corrections incorporating this feature and request the Examiner to approve these proposed corrections. Additionally, Applicants submit herewith a Submission of Corrected Drawings incorporating the proposed drawing correction and request the Examiner to indicate that these drawings are accepted in the next Patent Office correspondence.

Applicants note that the disclosure of an illustrative, non-limiting embodiment of the magnetic tape drawing-out port provided between a position corresponding to a screw hole used for assembling upper and lower cases and provided in the corner of the cartridge case, and a position corresponding to a reference hole provided in the vicinity of a central portion of the cartridge case, is disclosed in the Summary of the Invention (see page 10, first full paragraph, of the specification). Therefore, no new subject matter is added.

Further, Applicants amend the Detailed Description of the Preferred Embodiments to include this feature and its corresponding reference numeral.

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II. Indefiniteness Rejections

The Examiner rejects claims 1-10 under 35 U.S.C. § 112, second paragraph, as being indefinite. Therefore, Applicants amend claims 1, 6, and 7 to more clearly define the present invention. These amendments are believed to overcome the indefiniteness rejections. Therefore, Applicants request the Examiner to withdraw the indefiniteness rejections of claims 1-10.

III. Anticipation Rejections

A. Claims 1, 8, and 11:

The Examiner rejects claims 1, 8, and 11 under 35 U.S.C. § 102(b) as being anticipated by Martin (U.S. Patent No. 3,606,185). For the following reasons, Applicants traverse the rejections of claims 1, 8, and 11.

Claim 1

With respect to claim 1, the Examiner alleges that Martin discloses a magnetic tape cartridge having a housing including integral upper and lower cases. The Examiner alleges that the upper case has a circular opening having a diameter greater than the diameter of the lower flange and smaller than the diameter of the upper flange. Applicants respectfully disagree with the Examiner for at least the following reasons.

Claim 1 relates to a new and unique combination of elements that form a single reel magnetic tape cartridge having a reduced number of components, thereby reducing manufacturing costs, and a reduced overall thickness. In particular, claim 1 recites, *inter alia*, a

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single reel including a circular upper flange and a circular lower flange, wherein the circular upper flange has “an outer diameter larger than the outer diameter of the lower flange”.

Additionally, claim 1 recites a cartridge case which includes “a lower case” which has “a first opening at a position corresponding to the engaging portion of said lower flange”, and “an upper case” which has “a circular second opening having an inner diameter larger than the outer diameter of said lower flange but smaller than the outer diameter of said upper flange; wherein said upper flange closes the circular second opening of said upper case to form a central portion on an upper side of said cartridge case.”

Contrary to the Examiner’s position, Martin does not disclose or suggest at least an upper case which has “a circular second opening having an inner diameter larger than the outer diameter of said lower flange but smaller than the outer diameter of said upper flange”, as recited in claim 1. That is, the top plate 208 (compared by the Examiner to the claimed upper flange) has a circular opening that is clearly smaller than the retaining plate 210 (compared by the Examiner to the claimed lower flange). Therefore, Applicants submit that Martin neither discloses nor suggests at least this recitation, and thus, the anticipation rejection of claim 1 by Martin should be withdrawn.

Moreover, Applicants respectfully submit that the Examiner’s position is not convincing for several other reasons. For example, Martin also does not disclose or suggest at least a cartridge having a circular upper flange and an upper case. That is, Martin discloses a top plate 208. At best, the top plate 208 can be compared to either the claimed upper flange or the upper case, not to both the upper flange and the upper case.

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Assuming *arguendo*, the Examiner compares the top plate 208 to both the claimed upper flange and the upper case, then Martin cannot disclose an upper case having a circular second opening wherein the upper flange closes the circular second opening of the upper case to form a central portion on an upper side of the cartridge case. That is, if the top plate 208 is the upper flange and the upper case, the top plate 208 cannot close the hole inside of itself. In other words, the top plate would have to be divided into two elements.

Therefore, for at least any one of the foregoing reasons, Applicants submit that Martin does not anticipate independent claim 1, and thus, the rejection of claim 1 should be withdrawn.

Claim 8

Applicants submit that claim 8 is patentable over Martin at least by virtue of its dependency from independent claim 1. Additionally, Applicants submit that claim 8 is individually and separately patentable at least by virtue of the additional features recited therein.

Claim 11

The Examiner alleges that Martin discloses that the tape drawing-out port 218 of Martin is spaced from the corner of the cartridge, as recited in claims 8 and 11. Applicants respectfully disagree with the Examiner's position for at least the following reasons.

Applicants submit that Martin does not disclose or suggest at least magnetic tape drawing-out port that is "provided on a side surface of said cartridge case at a position apart from a corner of said cartridge case", as recited in claim 11. On the contrary, Martin discloses the exit slot 218 (compared by the Examiner to the claimed drawing-out port) located at the corner of the

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cartridge in a manner similar to the Prior Art disclosed in Figure 7. That is, the exit slot 218 is disposed at the corner, except for the thickness of the tangential extension 216. Similarly, Figure 7 depicts the prior art cartridge having an opening 44 disposed at the corner of the cartridge, except for the thickness of the side portion of the casing 52. Thus, Applicants submit that Martin merely discloses an exit slot 218 (i.e., an opening) that suffers from the same deficiencies as the Prior Art of Figure 7.

Moreover, claim 11 recites, *inter alia*, a generally rectangular cartridge case in which a single reel wound with a magnetic tape is rotatably housed. However, contrary to claim 11, Martin discloses a generally circular cartridge.

Therefore, for at least the foregoing reasons, Applicant submit that Martin does not disclose or suggest all of the recitations of claim 11, and thus, the anticipation rejection of claim 11 should be withdrawn.

IV. Obviousness Rejections

A. Claim 2:

The Examiner rejects claim 2 under 35 U.S.C. § 103(a) as being obvious over Martin.

Applicants submit that claim 2 is patentable over Martin at least by virtue of its dependency from independent claim 1. Additionally, Applicants submit that claim 2 is individually and separately patentable at least by virtue of the additional features recited therein.

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B. Claims 3 and 4:

The Examiner rejects claims 3 and 4 under 35 U.S.C. § 103(a) as being obvious over Martin and Del Genio et al. (U.S. Patent No. 6,034,850, hereinafter “Del Genio”). For the following reasons, Applicants traverse these rejections.

For the reasons set forth above, Martin does not disclose or suggest all of the recitations of claim 1 (from which claims 3 and 4 depend). In addition, Del Genio does not make up for the deficiencies of Martin. For example, Del Genio also does not disclose or suggest at least an upper case which has “a circular second opening having an inner diameter larger than the outer diameter of said lower flange but smaller than the outer diameter of said upper flange”, as recited in claim 1. In fact, Del Genio discloses only a first opening 136, but not a second opening (see Figure 7). That is, the top part of the housing 104 of Del Genio does not include an opening.

For at least these reasons, Applicants submit that neither Martin nor Del Genio discloses or suggests at least this recitation; and thus, claim 1 (and dependent claims 3 and 4) would not have been obvious from any combination of Martin and Del Genio. Accordingly, the obviousness rejection of claims 3 and 4 should be withdrawn.

C. Claims 5-7:

The Examiner rejects claims 5-7 under 35 U.S.C. § 103(a) as being obvious over Martin and Egan (German Patent No. 2166321). For the following reasons, Applicants traverse these rejections.

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For the reasons set forth above, Martin does not disclose or suggest all of the recitations of claim 1 (from which claims 5-7 depend). In addition, Egan does not make up for the deficiencies of Martin. For example, Egan also does not disclose or suggest at least an upper case which has “a circular second opening having an inner diameter larger than the outer diameter of said lower flange but smaller than the outer diameter of said upper flange”, as recited in claim 1. At best, Egan discloses a U-shaped opening formed in a secondary flange 14, as shown in Figures 1 and 3. Additionally, the upper portion of the cartridge case 1 does not include an opening.

For at least these reasons, Applicant submit that Egan also does not make up for the deficiencies of Martin; and accordingly, neither Martin nor Egan, either alone or in combination, discloses or suggests all of the recitations of claim 1 (and dependent claims 5-7). Thus, claims 5-7 would not have been obvious from any combination of Martin and Egan and the obviousness rejection of claims 5-7 should be withdrawn.

D. Claims 9, 10, 12, and 13:

The Examiner rejects claims 9, 10, 12, and 13 under 35 U.S.C. § 103(a) as being obvious over Martin and Hall (U.S. Patent No. 3,834,650). For the following reasons, Applicants traverse these rejections.

Claims 9 and 10

For the reasons set forth above, Martin does not disclose or suggest all of the recitations of claim 1 (from which claims 9 and 10 depend). In addition, Hall does not make up for the

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deficiencies of Martin. For example, Hall also does not disclose or suggest at least an upper case which has "a circular second opening having an inner diameter larger than the outer diameter of said lower flange but smaller than the outer diameter of said upper flange", as recited in claim 1.

Instead, Hall merely discloses an upper case 12 and lower case 2 having a passage 38 and a spool 40, wherein the spool 40 is larger in diameter than the passage 38. In Hall, since the tape is wound around the spool 40, it would not be possible for a flange that supports the tape to have a diameter that is less than the diameter of the passage 38 (i.e., the opening). That is, any flange employed in Egan would surround the passage 38 and support the tape, and thus, any flange used in Egan must have a larger outer diameter than the passage 38.

For at least these reasons, Applicants submit that Hall also does not make up for the deficiencies of Martin, and accordingly, neither Martin nor Hall, either alone or in combination, discloses or suggests all of the recitations of claim 1 (and dependent claims 9 and 10). Thus, Applicants submit that claims 9 and 10 would not have been obvious from any combination of Martin and Hall and the obviousness rejection of claims 9 and 10 should be withdrawn.

Furthermore, with respect to claim 10, the Examiner alleges that it would have been obvious to have located the tape draw-out port so that its central portion was approximately one quarter of the edge length of the side of the cartridge from the corner in order to make the cassette usable with a drive having a tape-take-out mechanism positioned in a similar relationship to the cartridge. Applicants respectfully submit that the Examiner has not provided any support for this allegation. That is, the Examiner has not set forth any disclosure or

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suggestion, either in the applied references or known art, of a tape take-out mechanism that would necessitate positioning of the tape draw-out port as recited by claim 10.

Claims 12 and 13

As set forth above, Martin does not disclose or suggest all of the recitations of independent claim 11 (from which claims 12 and 13 depend). Additionally, Applicants submit that Hall does not make up for the deficiencies of Martin. That is, Hall does not disclose or suggest at least a magnetic tape drawing-out port “provided on a side surface of said cartridge case at a position apart from a corner of said cartridge case”, as recited in claim 11.

Moreover, Applicants submit that claims 12 and 13 are separately and individually patentable over the combination of Martin and Hall at least by virtue of the additional recitations recited therein.

For example, neither Martin nor Hall discloses or suggests a magnetic tape cartridge wherein “a magnetic tape drawing-out port is provided between a position corresponding to a screw hole used for assembling upper and lower cases and provided in the corner of said cartridge case, and a position corresponding to a reference hole provided in the vicinity of a central portion of said cartridge case”, as recited in claim 12. In fact, neither Martin nor Hall even discloses a reference hole, as recited in claim 12.

Additionally, neither Martin nor Hall discloses or suggests a magnetic tape cartridge wherein “a central position of said magnetic tape drawing-out port is located at a position apart

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from the corner of said cartridge case by a distance equivalent to approximately one quarter of an edge length of the side surface of said cartridge case", as recited in claim 13.

On the contrary, Martin discloses an exit slot 218 disposed at the corner of the cartridge, not at a position apart from the corner of the cartridge case by a distance equivalent to approximately one quarter of an edge length of the side surface of the cartridge case, as recited in claim 13. On the other hand, Hall discloses a second passage 48 in the sidewall 12 that is disposed at the middle of the sidewall, not at a position that is one quarter of the edge length of the sidewall, as recited in claim 13.

Additionally, with respect to claim 13 (as with claim 10 above), the Examiner alleges that it would have been obvious to have located the tape draw-out port so that its central portion was approximately one quarter of the edge length of the side of the cartridge from the corner in order to make the cassette usable with a drive having a tape-take-out mechanism positioned in a similar relationship to the cartridge. Again, Applicants submit that the Examiner has not set forth any disclosure or suggestion, either in the applied references or known art, of a tape take-out mechanism that would necessitate positioning of the tape draw-out port, as recited by claim 13.

Therefore, for at least the foregoing reasons, Applicants submit that claims 12 and 13 are not obvious over any combination of Martin and Hall, and thus, the obviousness rejection of claims 12 and 13 should be withdrawn.

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V. New Claims

Applicants add new claims 14 and 15. Applicants submit that these claims are patentable at least by virtue of their dependency from claims 8 and 11, respectively. Additionally, claims 14 and 15 are separately and individually patentable over the applied references at least by virtue of the additional features recited therein.

Additionally, Applicants add new claims 16-19. Applicants submit that new claims 16-19 are separately and individually patentable over the applied references.

For example, new claim 18 recites, *inter alia*, “a drawing-out member is provided at one end of said magnetic tape and said magnetic tape is drawn out of said magnetic tape drawing-out port by said drawing-out member.” Applicants submit that the features defined by claim 18 prevent or decrease damage to the magnetic tape, since the drawing-out port and drawing-out member are apart from the corner of the cartridge. Therefore, for at least these reasons, claim 18 is patentable over the applied references.

VI. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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Date: February 28, 2003



APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is changed as follows:

At page 20-21, replace the bridging paragraph with the following new paragraph:

As is evident from the exemplary embodiment shown in Fig. 4, [it is preferable that] the position S of the magnetic tape drawing-out port (opening 42) of the magnetic tape cartridge 10 is on the outer side with respect to the reference hole (here, 10b) of the magnetic tape cartridge 10 but on the inner side with respect to the corner 10p of the cartridge case 12 of the magnetic tape cartridge 10. In an exemplary embodiment of the present invention, the magnetic tape drawing-out port (opening 42) is provided between a position corresponding to a screw hole 70 used for assembling upper and lower cases 12a, 12b and provided in the corner 10p of the cartridge case 12, and a position corresponding to a reference hole (here, 10b) provided in the vicinity of a central portion of the cartridge case 12.

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IN THE CLAIMS:

The claims are amended as follows:

1. (Amended) A magnetic tape cartridge comprising:

a single reel including a circular lower flange in which an engaging portion for engaging a rotary shaft of a recording/reproducing apparatus is centered, and a circular upper flange which

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is arranged so as to be opposed to the lower flange and has an outer diameter larger than the outer diameter of the lower flange;

a magnetic tape which is wound between said upper flange and said lower flange; and

a cartridge case within which said single reel is rotatably accommodated and which includes a lower case into which said rotary [rotation] shaft is inserted and which has a first opening at a position corresponding to the engaging portion of said lower flange, and an upper case which has a circular second opening having an inner diameter larger than the outer diameter of said lower flange but smaller than the outer diameter of said upper flange;

wherein said upper flange closes the circular second opening of said upper case to form a central portion on an upper side of said cartridge case.

6. (Amended) The magnetic tape cartridge according to claim 5, wherein each of said at least two reel engaging units [unit] includes an urging unit for urging said upper flange toward said upper case.

7. (Amended) The magnetic tape cartridge according to claim 5, wherein engagement of said upper flange of said single reel by each of said at least two reel engaging units [unit] is released when the magnetic tape cartridge is loaded into said recording/reproducing apparatus.

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New claims 14-19 are added.